UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/673,440	11/20/2000	Masato Shimakawa	450101-02342	5342

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EXAMINER
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ART UNIT	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
	09/673,440	SHIMAKAWA ET AL.
Office Action Summary	Examiner	Art Unit	
	Myriam Pierre	2626	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>06/14/06</u>.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>35-66</u> is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>35-66</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All   b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.

4) ☒ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

DETAILED ACTION

1.   The text of those sections of Title 35, U.S. Code not included in this action can be found

in a prior Office action.

Response to Argument

3. The applicant's arguments have been fully considered and the applicant's arguments are not

persuasive for the following reasons:

IV. 35 U.S.C. 102 Rejection

Applicant's arguments with respect to claim 35, in regards to Takeda et al.

et al. (5,826,220) (herein "Takeda"), that Takeda fails to teach or suggest modifying translation

information in accordance with the determined applicability of each translation candidate to the

source language sentence data, wherein a translation of a next source language sentence is a

function of the modified translation information, as recited in claim 35. This argument is not

persuasive because Takeda teach or disclose change of a translation word from that obtained by

the machine translation word specified by a user is learned by registering a learning data

indicating a headword, a top candidate translation word corresponding to a lexical rule applied in

translating this headword, and the specified translation word, only when an original word and a

top candidate translation word for this original word obtained by the machine translation

coincide with the headword and the top candidate translation word, Abstract

Applicant further argues that neither Sukeda nor Kleinschmidt, taken alone or in

combination, provide the disclosure missing in Takeda. This argument is a moot point because

Takeda do teach or suggest modifying translation information as stated in the above paragraph.

The translation information is merely description of the source language and a corresponding

language part of a sentence and by using the translation information, it is able to translate the

source sentence part into the translated version. In Takeda, the learning data registered in the

translation word learning dictionary, when updated, the dictionary registers a plurality of lexical

rules and one or more translation words with respect to the original word (headword), in

updating the dictionary registry Takeda is modifying or changing a translation word using the

updated translation information, col. 12 lines 18-24; col. 2 line 65-col. 3 line 5.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 35-39 and 51-55 are rejected under 35 U.S.C. 102(b) as being anticipated by Takeda

et al. (5,826,220).

As to claim 35, Takeda et al. teach

A translation method for translating source language sentence data to target language data

comprising:

accessing (translating) the source (original) language sentence (translating original

sentences in a first language col. 3 lines 8-9);

accessing translation information (col. 3 lines 8-11);

wherein the translation information (translation dictionary) includes one descriptor

(headword) describing the source (first) language sentence data, corresponding target (second)

language sentence data (translation dictionary storing headwords in the first language and

candidate translation word in the second language, col. 3 lines 10-14) , and related information

(lexical rules) that limits the applicability of the target (second) language sentence data to the

source language sentence data (candidate translation) (candidate translation word in the second

language corresponds to each lexical rules, col. 3 lines 10-14; the lexical rules are what limits the

possible candidate translation);

determining a relationship between the source language sentence data and

the translation information (translation dictionary) (Fig. 12, elements e-d, "sentence structure";

the sentence structure for the original and translated sentences are compared, thus a

determination of the relationship between the source and translation information is established by

analyzing the syntactic structure of the potentially matching translation, the corresponding

translation is obtained through the translation dictionary);

generating one candidate as a function of the translation information (translation

dictionary) and the relationship between the source language sentence data and the translation

information (translation dictionary)(Fig. 27; the "Candidate Translation Word" is a function of

the translation dictionary and the relationship between the source language sentence data (under

"Headword") and the translation dictionary (under "Candidate Translation Word")); and

determining applicability of each translation candidate to the source language data (Fig.

28-29; under "examine " and "inspect", the applicability of each translation candidate to the

source is checked) and

modifying translation information in accordance with the determined applicability of

each translation candidate to the source language sentence data (a change of a translation word

from that obtained by the machine translation word specified by a user is learned by registering a

learning data indicating a headword, a top candidate translation word corresponding to a lexical

rule applied in translating this headword, and the specified translation word, only when an

original word and a top candidate translation word for this original word obtained by the

machine translation coincide with the headword and the top candidate translation word, Abstract;

thus the applicability is conducted via the candidate selection process).

wherein the translation of the next sentence is a function of the modified translation

information (col. 12 lines 18-24; col. 2 line 65-col. 3 line 5; modifying or changing a translation

word using the updated translation information).

As to claim 51, Takeda et al. teach a translation apparatus (dictionary, Abstract)

comprising:

input means for entering source language sentence data (Fig. 10)

storage means for storing translation information (col. 5 lines 14-20)

wherein translation information includes one or more descriptor describing the source

language sentence data, the corresponding target language sentence data, and related information

that limits the applicability of the target language sentence data to the source language sentence

data (col. 3 lines 10-14; lexical rules and candidate selections are used to limit or filter data)

analysis means for determining, according to said translation information, a relationship

between source language sentence data and the translation information, thereby analyzing said

source language sentence data and generating one or more translation result candidates (col. 3

lines 10-14 and Figs. 10, 12-14);

target language sentence generation means for generating said target language sentence

data as a translation of said source language sentence data (Figs. 10, 12-14);

modifying means for modifying translation information in accordance with a determined

applicability of each translation candidate to the source language sentence data (a change of a

translation word from that obtained by the machine translation word specified by a user is

learned by registering a learning data indicating a headword, a top candidate translation word

corresponding to a lexical rule applied in translating this headword, and the specified translation

word, only when an original word and a top candidate translation word for this original word

obtained by the machine translation coincide with the headword and the top candidate translation

word, Abstract);

wherein the translation of the next sentence is a function of the modified translation

information (col. 12 lines 18-24; col. 2 line 65-col. 3 line 5; modifying or changing a translation

word using the updated translation information); and

output means for outputting said target language sentence data generated by said target

language sentence generation means (Figs. 10, 12-14)

As to claims 36 and 52, which depends on claims 35 and 51, Takeda et al. teach

related information supports an interpretation of a meaning of said target language

sentence data corresponding to said source language sentence data accessed (col. 3 lines 10-15;

translation based on lexical rules in translation dictionary, which is inherent to interpretation of a

meaning of target language sentence).

As to claims 37 and 53, which depends on claims 36 and 52, Takeda et al. teach

related information contains a check source language sentence as a variation of said

target language sentence data corresponding to said source language sentence data accessed (Fig.

25A-C and Fig. 27; lexical rules or related information contains 'check source language' which

corresponds with the 'candidate translation word' or target language, translating words is

inherent to the process of translating sentences)

As to claims 38 and 54, which depends on claims 37 and 53, Takeda et al. teach

a description of said check source language sentence is omitted in said translation

information when said source language sentence data matches the check source language

sentence that is described in the translation information (Fig. 12; "Subject" "Object" and

"Definitive" are omitted in element e, the Translated sentence Syntactic Structure" when there is

a match, see a-c, J2 in element b was chosen and the object "transportation means" is omitted).

As to claim 39 and 55, which depends on claims 37 and 53, Takeda et al. teach

wherein related information includes at least one of a status explaining sentence in said

source language that explains the status where said check source language is used (Fig. 12

elements a-c; the "Object" "Transportation means" are status explaining in source language

regarding were the check source language is used, such as in Fig. 25 A-C).

Claim Rejections - 35 USC § 103

6.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness

rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

7.   Claims 40-46, 49-50 and 56-62, 65-66 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Takeda et al. (5,826,220) as applied to claim 35 above, and further in view of

Sukeda et al. (5,854,997).

As to claims 40 and 56, which depend on claims 35 and 51, Takeda et al. teach related

information

Takeda et al. do not explicitly teach prediction of next source language.

However, Sukeda et al. do teach

predicted next source language sentence data based on the source language sentence that

has been accessed (Fig. 4a element 411; the desired sentence on the screen is in the source

language, the method of selection options in the source language necessarily predicts the next

source sentence based on the previous one for each set of sentences matches a situation requiring

likely set of sentences to be exchanged during the course of conversation).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the

invention to implement Sukeda et al.'s predict next source language sentence based on the source

language sentence for interpreting sentences into the method of Takeda et al., because Sukeda et

al. teach that communications between persons who do not mutually understand the language,

thus, when a user selects a sentence, a set of sentences correlated to the selected sentences can be

called up, (Sukeda et al. col. 8 lines 12-16).

As to claims 41 and 57, which depend on claims 35 and 51, Takeda et al. do not

explicitly teach field information for limiting predicted next source language sentence.

However, Sukeda et al. do teach

field information (Fig. 4a element 409) that is used for limiting predicted next source

language sentence data (Fig. 7, elements 706, 715 and 720; selected menu button necessarily

limits the predict next source language because of the CARD KEYBOARD SELECTION

process in elements 710-716, once a card is selected, the predicted next source sentence is

accessed in 720, when a user selects 706, the card 715 is chosen and therefore limits the

predicted next source language via 725, Fig. 7 shows the operation behind Fig. 4a-b).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the

invention to implement Sukeda et al.'s limit field information into the method of Takeda et al.

because Sukeda et al. teach that this would provide keywords used for retrieving sentences which

are appropriate for the context of the conversation, (Sukeda et al. col. 5 lines 16-19 and 26-29).

As to claims 42 and 58, which depend on claims 35 and 51, Takeda et al. teach wherein

said related information includes source language sentence (Fig. 25A-C and Fig. 27).

Takeda et al. do not explicitly teach response sentence prediction.

However, Sukeda et al. do teach

at least one of a response sentence that necessarily predicts a response to said source

language sentence data (Fig. 4a element 411; response sentences such as "Good Morning" and

"How are you?" are predicted responses from element 706).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the

invention to implement Sukeda et al.'s prediction of the next source language sentence in the

method of Takeda et al., because Sukeda et al. teach that this would provide persons who do not

mutually understand a language, communication with each other because when a sentence is

selected, a set of sentences correlated to the selected sentences can be called up, (Sukeda et al.

col. 8 lines 12-16).

As to claims 43 and 59, which depend on claims 35 and 58,

Takeda et al. teach the translation method as claimed in claim 35,

further comprising the steps of:

determining whether a translation result of said source language sentence data is a

corresponding target language sentence data in accordance with said related information (Fig.

20B; the flow chart is an example of verification process that the translation result matches the

source in accordance with related information or lexical rules (lexical rules are part of candidate

translation process in element 719); and

reporting that said source language sentence data cannot be translated when no target

language sentence data corresponds to said source language sentence data based on said related

information (when there is no appropriate translation word in the display list at step 717, the user

presses a registration key, the system is switched to a translation word input mode, col. 11 lines

39-44; the method of switching from the list to the registration key is necessarily reporting that

there isn't a translation, thus the need to update the system by registering the new word).

As to claims 44 and 60, which depend on claims 35 and 51,

Takeda et al. teach wherein target language sentence data is accessed and translated into

the source language sentence data (Fig. 12).

As to claims 45 and 61, which depend on claims 44 and 60,

Takeda et al. teach wherein said related information

Takeda et al. do not explicitly teach predicting the next target language sentence data.

However, Sukeda et al. do teach includes predicted next target language sentence data

based on the target language sentence that has been accessed (Fig. 4b, elements 710 and 715;

options of the translated or target language sentence based on the target language already

accessed element 710, thus the prediction process is necessarily part of the display option).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the

invention to implement Sukeda et al.'s predict next source language sentence based on the source

language sentence for interpreting sentences into the method of Takeda et al., because Sukeda et

al. teach that would help communication, thus when a sentence is selected, a set of sentences

correlated to the selected sentences can be called up, (Sukeda et al. col. 8 lines 12-16).

As to claims 46 and 62, which depend on claims 44 and 60,

Takeda et al. teach related information.

Takeda et al. do not explicitly teach limiting prediction of next target language sentence

based on the accessed source language sentence.

However, Sukeda et al. do teach

wherein said related information includes field information that is used for limiting

predicted next target language sentence data based on the source language sentence data that has

been accessed (Fig. 7, elements 706, 715 and 720; selected menu button necessarily limits the

predict next source language because of the CARD KEYBOARD SELECTION process in

elements 710-716, once a card is selected, the predicted next source sentence is accessed in 720,

when a user selects 706, the card 715 is chosen and therefore limits the predicted next source

language via 725, Fig. 7 shows the operation behind Fig. 4a-b).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the

invention to implement Sukeda's limit field information based on predicted next source language

sentence into the method of Takeda et al., because Sukeda et al. teach that this would help to

find keywords used for retrieving sentences which are appropriate for the context of the

conversation (Sukeda et al. col. 5 lines 16-19 and 26-29).

As to claims 49 and 65, which depend on claims 35 and 51, Takeda et al. do not

explicitly teach response prediction.

However, Sukeda et al. do teach

wherein response prediction information is generated in response to said source language

sentence data accessed, and the response prediction information that is generated is presented

(Fig. 4a element 411; response sentences such as "Good Morning" and "How are you?" are

predicted responses from element 706).

Therefore, , it would have been obvious to one of ordinary skill in the art at the time of

the invention to implement Sukeda et al.'s prediction of the next source language sentence in the

method of Takeda et al., because Sukeda et al. teach that this would provide persons who do not

mutually understand a language, communication with each other because when a sentence is

selected, a set of sentences correlated to the selected sentences can be called up, (Sukeda et al.

col. 8 lines 12-16).

As to claims 50 and 66, which depend on claims 49 and 65, Takeda do not explicitly

teach response prediction.

However, Sukeda et al. do teach

wherein said response prediction information includes at least one of a response

described as said related information in the translation information corresponding to said source

language data (Fig. 4b, elements 710 and 715; options of the translated or target language

sentence based on the target language already accessed element 710, thus the prediction process

is necessarily part of the display option); and

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the

invention to implement Sukeda et al.'s prediction of the next source language sentence in the

method of Takeda et al., because Sukeda et al. teach that this would provide persons who do not

mutually understand a language, communication with each other because when a sentence is

selected, a set of sentences correlated to the selected sentences can be called up, (Sukeda et al.

col. 8 lines 12-16).

8.   Claims 47 and 63 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takeda et

al. (5,826,220), as applied to claim 35 above, in view of Kleinschmidt et al. (6,085,112).

As to claims 47 and 63, which depends on claims 35 and 51,

Takeda et al. teach source and target language.

Takeda et al. do not explicitly teach voice input or voice output.

However, Kleinschmidt et al. do teach

wherein said source language sentence data is accessed and recognized as voice data and

said target language data is generated and output as voice data (speech input and output means,

foreign translation within scope of communication device, col. 3 lines 35-37 and col. 4 lines 64-

67).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the

invention to implement Kleinschmidt et al.'s process source and translated language as input and

output into the method of Takeda et al., because Kleinschmidt et al. teach that would permit

commands to be issued to the device without using hands and/or permits message from the

device to be perceived without the eyes, (Kleinschmidt et al. col. 3 lines 35-40).

9.   Claims 48 and 64 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takeda et

al. (5,826,220) in view of Kleinschmidt et al. (6,085,112), as applied to claims 47 and 63 above,

in further view of in view of Sukeda et al. (5,854,997).

As to claims 48 and 64, which depends on claims 47 and 63,

Takeda et al. teach wherein said related information

Takeda et al. do not explicitly teach including predicting the next source language

sentence or voice recognition.

However, Kleinschmidt et al. do teach

voice recognition (speech recognition, col. 8 line 56).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the

invention to implement Kleinschmidt et al.'s limit field information via voice recognition into

the method of Takeda et al., because Kleinschmidt et al. teach that would permit commands to be

issued to the device without using hands and/or permits message from the device to be perceived

without the eyes, (Kleinschmidt et al. col. 3 lines 35-40).

Takeda in view of Kleinschmidt et al. do not explicitly teach predicting the next source

sentence.

However, Sukeda et al. do teach

predicted next source language sentence data based on the source language sentence data

that has been accessed (Fig. 4b, elements 710 and 715; options of the translated or target

language sentence based on the target language already accessed element 710, thus the prediction

process is necessarily part of the display option); and

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the

invention to implement Sukeda et al.'s prediction of the next source language sentence based on

the source language sentence for interpreting sentences into Takeda et al. in view of

Kleinschmidt et al., because an artisan of ordinary skill in the art would create an option of

translations for language translation wherein a set of sentences correlated to the selected

sentences can be called up, (Sukeda et al. col. 8 lines 12-16).

Conclusion

10.   **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time

policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the mailing

date of this final action.

11.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Myriam Pierre whose telephone number is 571-272-7611. The

examiner can normally be reached on Monday – Friday from 8:30-5:30p.m.

12.   If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Richemond Dorvil can be reached on (571) 272-7602. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MP 8/21/06

RICHEMOND DORVIL
SUPERVISORY PATENT EXAMINER